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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/772,877	02/03/2004	Albert R. Harvey	2507-5787.2US (21811-US-0)	5564
24247	7590	01/04/2005	EXAMINER KOSLOW, CAROL M	
TRASK BRITT P.O. BOX 2550 SALT LAKE CITY, UT 84110			ART UNIT 1755	PAPER NUMBER

DATE MAILED: 01/04/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/772,877

Applicant(s)

HARVEY ET AL.

Examiner

C. Melissa Koslow

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 08 October 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-5 and 8-26 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-5 and 8-26 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 10/8/04.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

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This action is in response to applicants' amendment of 8 October 2004. The terminal disclaimer filed on 8 October 2004 disclaiming the terminal portion of any patent granted on this application which would extend beyond the expiration date of 6,691,505 has been reviewed and is accepted. The terminal disclaimer has been recorded. Accordingly, the obviousness-type double patenting rejection has been overcome. The amendments to the claims have overcome the 35 USC 112 rejection, the 35 USC 102(b) rejections and 35 USC 103(a) rejections over U.S. patents 5,409,775 and 5,989,459. Applicant's arguments with respect to the objection of claims 2 and 15 under 37 CFR 1.75(c) have been fully considered and are persuasive. The objection of claims 2 and 15 has been withdrawn. Applicant's arguments with respect to the remaining art rejection have been fully considered but they are not persuasive.

Claims 1, 2, 14 and 15 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 1 and 2 are duplicate claims. Claims 14 and 15 are duplicate claims. Claims 2 and 15 give the inherent structure of the vapor-grown carbon fibers of claims 1 and 14. Thus there is no difference in scope between the claims 1 and 2 and claims 14 and 15. Applicant is advised that should claims 1 and 14 be found allowable, claims 2 and 15 will be objected to under 37 CFR 1.75 as being a substantial duplicate thereof. When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k).

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The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 1-5 and 8-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP 08-127674.

This reference teaches a material comprising natural or synthetic rubber and vapor-grown carbon fibers, which inherently have the claimed structure. These fibers are known to have a high graphitization index, which means it is above 50%. This index range overlaps the claimed range. The material is produced by homogenously mixing or dispersing the fibers with a crosslinkable rubber polymer, such as the precursor for natural rubber or polyisoprene or polybutadiene, and a sulfur containing curative. The examples show that the precursor mixture is solvent free. The taught amount of fibers of 10-150 parts by weight corresponds to about 6.7-45.4 wt% of the composition. This range overlaps the claimed range. It is noted that the amount of crosslinkable polymer is about 30-66 wt% of the composition. The taught fibers having a diameter of 0.05-0.5 microns and a length of 10-100 microns, both of which overlap the claimed ranges. Product claims with numerical ranges which overlap prior art ranges were held to have been obvious under 35 USC 103. *In re Wertheim* 191 USPQ 90 (CCPA 1976); *In re Malagari* 182 USPQ 549 (CCPA 1974); *In re Fields* 134 USPQ 242 (CCPA 1962); *In re Nehrenberg* 126 USPQ 383 (CCPA 1960). Since the composition overlap that claimed and the fiber size overlaps that claimed, one of ordinary skill in the art would expect the taught composition to have a volume resistivity, tear resistance, parallel tensile strength and perpendicular and parallel elongation ranges to overlap the claimed ranges, absent any showing to the contrary. While the

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reference does teach the material contains silica, silica does not materially affect the basic and novel characteristics of the claimed invention. *In re Herz*, 537 F.2d 549, 551-52, 190 USPQ 461, 463 (CCPA 1976). This is because paragraph [0045] of the specification teaches the inventive material can contain silica as an optional component. The reference suggests the claimed material and process.

Applicants argue the taught process of dispersing the vapor-grown carbon fibers does occur in the presence of a solvent and points to paragraph [0045] to support this statement. This paragraph teaches the precursors used to make the fibers. It is not to the process of dispersing the fibers in the rubber precursor. The dispersing step is taught in the examples and there is no solvent indicated in the examples. Thus this argument is not convincing.

Applicants argue the reference does not teach all the elements of claims 1 and 14. The reference teaches the amount of vapor-grown carbon fibers is about 6.7-45.4 wt%, which encompasses the claimed range of 10-30 wt%. Thus the reference does suggest the claimed amount of fibers. As discussed above, the limitation of consisting essentially does not exclude the taught silica and thus the reference does suggest a composition consisting essentially of a cured elastomer and vapor-grown carbon fibers. These arguments do not overcome the rejection.

In response to applicant's argument that the taught material has a different use than applicants' claimed material, a recitation of the intended use of the claimed invention must result in a structural or material difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art composition is capable of performing the intended use, then it meets the claim. In a claim drawn to a process of making, the intended use must result in a manipulative difference as compared to the prior art.

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See *In re Casey*, 152 USPQ 235 (CCPA 1967) and *In re Otto*, 136 USPQ 458, 459 (CCPA 1963). There has been no showing that the taught composition cannot be used as an insulting material for a rocket motor. The rejection is maintained.

Applicant's amendment and arguments necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Melissa Koslow whose telephone number is (571) 272-1371. The examiner can normally be reached on Monday-Friday from 8:00 AM to 3:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Bell, can be reached at (571) 272-1362.

The fax number for all official communications is (703) 872-9306.

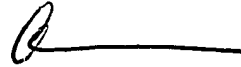
Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR

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system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

cmk

January 3, 2005



C. Melissa Koslow  
Primary Examiner  
Tech. Center 1700